

PATENT COOPERATION TREATY



From the
INTERNATIONAL SEARCHING AUTHORITY

To:
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PCT

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY
(PCT Rule 43bis.1)

| | |
|-------------------------------------|-------------|
| Date of mailing (day/month/year) | 26. 4. 2005 |
|-------------------------------------|-------------|

Applicant's or agent's file reference
S04-O-435CT1

FOR FURTHER ACTION

See paragraph 2 below

| | | |
|--|--|--|
| International application No. PCT/JP2005/000712 | International filing date (day/month/year) 13.01.2005 | Priority date (day/month/year) 16.01.2004 |
|--|--|--|

International Patent Classification (IPC) or both national classification and IPC
Int.Cl.⁷ H01L21/68, G02F1/1333

Applicant
SHARP KABUSHIKI KAISHA

1. This opinion contains indications relating to the following items:

- ☒ Box No. I Basis of the opinion
- ☐ Box No. II Priority
- ☐ Box No. III Non-establishment of opinion with regard to novelty, inventive step and industrial applicability
- ☐ Box No. IV Lack of unity of invention
- ☒ Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- ☐ Box No. VI Certain documents cited
- ☐ Box No. VII Certain defects in the international application
- ☐ Box No. VIII Certain observations on the international application

2. FURTHER ACTION

If a demand for international preliminary examination is made, this opinion will be considered to be a written opinion of the International Preliminary Examining Authority ("IPEA") except that this does not apply where the applicant chooses an Authority other than this one to be the IPEA and the chosen IPEA has notified the International Bureau under Rule 66.1bis(b) that written opinions of this International Searching Authority will not be so considered.

If this opinion is, as provided above, considered to be a written opinion of the IPEA, the applicant is invited to submit to the IPEA a written reply together, where appropriate, with amendments, before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later.

For further options, see Form PCT/ISA/220.

3. For further details, see notes to Form PCT/ISA/220.

| | | | |
|--|-------------------------------|------------|------|
| Date of completion of this opinion | | 12.04.2005 | |
| Name and mailing address of the ISA/JP | Authorized officer | 3C | 9147 |
| Japan Patent Office | Akihiro Nakajima | | |
| 3-4-3, Kasumigaseki, Chiyoda-ku, Tokyo 100-8915, Japan | Telephone No. +81-3-3581-1101 | Ext. 3324 | |

WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY

International application No.

PCT/JP2005/000712

Box No. I Basis of the opinion

1. With regard to the **language**, this opinion has been established on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.

☐ This opinion has been established on the basis of a translation from the original language into the following language _____, which is the language of a translation furnished for the purposes of international search (under Rules 12.3 and 23.1(b)).

2. With regard to any **nucleotide and/or amino acid sequence** disclosed in the international application and necessary to the claimed invention, this opinion has been established on the basis of:

a. type of material

- ☐ a sequence listing
☐ table(s) related to the sequence listing

b. format of material

- ☐ in written format
☐ in computer readable form

c. time of filing/furnishing

- ☐ contained in the international application as filed.
☐ filed together with the international application in computer readable form.
☐ furnished subsequently to this Authority for the purposes of search.

3. ☐ In addition, in the case that more than one version or copy of a sequence listing and/or table relating thereto has been filed or furnished, the required statements that the information in the subsequent or additional copies is identical to that in the application as filed or does not go beyond the application as filed, as appropriate, were furnished.

4. Additional comments:

**WRITTEN OPINION OF THE
INTERNATIONAL SEARCHING AUTHORITY**

International application No.

PCT/JP2005/000712

Box No. V Reasoned statement under Rule 43bis.1(a)(i) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement

1. Statement

| | | | |
|-------------------------------|--------|----------|-----|
| Novelty (N) | Claims | 2 - 8 | YES |
| | Claims | 1 | NO |
| Inventive step (IS) | Claims | 2 - 4 | YES |
| | Claims | 1, 5 - 8 | NO |
| Industrial applicability (IA) | Claims | 1 - 8 | YES |
| | Claims | | NO |

2. Citations and explanations

D1 : EP 0 8 6 7 7 7 3 A2 (NIKON CORPORATION)

1 9 9 8 . 0 9 . 3 0 & J P 1 0 - 2 7 0 5 3 5 A

& US 2 0 0 3 / 0 1 6 4 9 3 4 A1

D2 : J P 2 0 0 1 - 1 1 8 9 1 3 A (DAI NIPPON PRINTING CO., LTD.)

2 0 0 1 . 0 4 . 2 7

D3 : J P 6 - 2 4 2 4 3 1 A (HITACHI ELECTRONICS ENGINEERING CO., LTD.) 1 9 9 4 . 0 9 . 0 2

[C l a i m 1]

The subject matter of claim 1 does not appear to be novel with respect to D1. Claim 1 relates to [wherein a plurality of leak trenches open to both the adsorption face of the stage and a side face of the stage are formed in a region of the stage except a region where the adsorption ports are formed]. Such [wherein a plurality of leak trenches open to both the adsorption face of the stage and a side face of the stage are formed in a region of the stage except a region where the adsorption ports are formed] appears to be known from D1 (see [paragraph 28, Line 5 to 56, fig.6]).

[C l a i m 5, 6]

The subject matter of claim 5, 6 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 2 cited in the same.

Technical features [The fine projection parts 90] and [the convex parts 1c (especially [0012] and fig.2)], disclosed in D1 and D2 respectively, have the same function and are related to similar technical fields. Therefore, the skilled person in the art would easily conceive the idea of employing the feature [the convex parts 1c] in D2 to substitute the feature [The fine projection parts 90] disclosed in D1.

Supplemental Box

In case the space in any of the preceding boxes is not sufficient.

Continuation of: V

[C l a i m 7]

The subject matter of claim7 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 2 cited in the same.

In view of the description of D2, the skilled person would therefore regard it as a design procedure to include that the feature [a stripped pattern] instead of the [a grid pattern] in D2 in order to solve the problem posed.

[C l a i m 8]

The subject matter of claim8 does not appear to involve an inventive step in view of the document 1 cited in the ISR and the document 3 cited in the same.

The technical feature [holder 10] in D1 and the feature [holding parts 10,11] in D3 are concerned with mutually related technical fields. Therefore, the skilled person in the art would easily conceive the idea of employing the feature in D1 to substitute the feature disclosed in D3.

[C l a i m 2 - 4]

The subject matter of claim 2-4 is neither disclosed in any of the documents cited in the ISR nor obvious to a person skilled in the art.